Cohen (J Solis)

A CASE OF THYROTOMY FOR MORBID GROWTH, WITH SUBSEQUENT DEVELOPMENT OF EPITHELIOMA IN THE CUTANEOUS CICATRIX, BUT WITHOUT INVOLVEMENT OF THE INTERIOR OF THE LARYNX.

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Mr.——, æt. sixty-three, a practising attorney in one of the Southern States, was referred to me, June 23d, 1880, by Prof. D. Hayes Agnew, of the University of Pennsylvania, on account of a persistent hoarseness of some two years' duration, which had steadily increased in severity and had disabled him from pursuing his professional avocations. His general health was considerably impaired, though he was still quite vigorous, and his voice was a husky laryngeal whisper.

On laryngoscopic inspection, a sessile morbid growth, of about the bulk of a common white bean, was seen attached to the anterior portion of the right ventricle of the larynx, and apparently attached to the vocal band likewise, which it overlapped to a considerable extent. There was general catarrhal inflammation of the larynx. The inception of the disease was attributed by the patient to over-use of his voice while suffering with sore throat.

The location of the growth, its general aspect, and the age of the patient, aroused a suspicion that it might be an epithelioma, and I declined to institute any immediate intra-laryngeal measures; the more so that I feared tampering with even a papilloma in that situation might irritate it into malignancy.

The result of the consultation with Prof. Agnew, was that the patient was sent to Newport, for a month, to recuperate, and placed meanwhile under the medicinal influence of arsenic, iron, and strychnine.

On his return the tumor had so increased in size as to strengthen my opinion as to its malignancy, and on July 24th, with the assistance of Drs. Agnew and Seiler, I divided the larynx externally and extirpated the neoplasm from the vocal band by direct access.

Microscopic examination, by Dr. Seiler, determined the growth

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to be papillomatous, and I experienced the mortification of having possibly performed a needless operation.

The thyroid cartilage was ossified and required the use of strong bone-forceps for its division, and the section was attended with considerable comminution of bone, leaving irregularly spiculated edges. Recovery was prompt, however, though complete union was somewhat retarded by the fractured nature of the section of the thyroid cartilage; and on the fourteenth day the patient was able to attend at my office.

The external wound healed kindly. The anterior portions of the vocal bands became adherent, web-like, as so frequently follows the operation of thyrotomy, and the ventricular fold became adherent to the vocal band at the point from which the tumor had been removed. The voice was shrill.

On September 8th, and upon three subsequent occasions within the week ensuing, I divided the web with the galvano-caustic blade, and the vocal bands remained separated; the right band, which was adherent to the ventricular fold, remaining on a higher plane, and thus impairing the voice so that it was as bad as before the operation. Despite all that I could do I had to submit to a second mortification in permitting my patient to return to his home without a voice fit for work. I felt convinced, however, that vocal power would be restored by exercise, and urged daily systematic attempts at vocalization, at stated intervals. Within a couple of months I heard by letter that the voice was steadily improving, so that the patient was enabled to resume chamber practice; and at the meeting of the American Medical Association at Richmond, May, 1881, the patient met me for examination, and greeted me with a sonorous voice, with which, he told me, he had for some time been able to argue cases in court.

Laryngoscopic examination showed the ventricular fold, at the site of the disease, somewhat adherent to the vocal band near its anterior portion, which it covered in great measure. The larynx was slightly congested. There was no appearance of morbid growth, and no adhesion at the anterior commissure of the vocal bands. In phonation the ventricular fold of the wounded side overlapped the vocal band so thoroughly as to conceal it almost entirely from inspection. The external cicatrix had contracted considerably, but presented a very healthy appearance.

I saw the patient at my own home a fortnight later, and again in November of the same year. His voice was excellent, and he

reported himself as hard at work in his profession, and trouble only with occasional symptoms of superficial catarrhal laryngitis.

On May 30th of the following year (1882), the patient presented himself with a small subcutaneous nodule, the size of a cherry, over the right wing of the thyroid cartilage, which had been noticed for the first time some ten days before, and which was growing rapidly. It appeared as though attached to the cartilage, being immovable upon it. As I was to start next day for Saint Paul, to attend the meeting of the American Medical Association, I requested Prof. Agnew to remove it; which he did on June 2d, with the aid of our fellow-member, Dr. C. E. Bean, my office assistant. It was found not to be adherent to the cartilage. Recovery was prompt, and the patient soon returned to his home. Dr. Formad, of the University of Pennsylvania, examined the tumor microscopically and pronounced it a tubular epithelioma.

On August 16th, or ten weeks later, the patient again presented himself to me with a fresh nodule, the size of the kernel of a small almond, over the left wing of the thyroid cartilage. It was freely movable and was not connected with the cartilage. Its presence had been noticed but three days before. The old cutaneous cicatrices were very much puckered, and the last wound made for removing the previous nodule had a pin-point opening at its centre, with a minute irregular zone of fungous granulations, such as is seen in cloacæ leading from dead bone. I removed this nodule, which was found attached to the posterior surface of the sterno-thyroid muscle, closely bound down by connective tissue. On the second day the patient was able to attend at my office. This tumor was found by Dr. Formad to be another epithelioma.

As the wound of the former operation resisted healing, and the whole character of the skin around presented a very suspicious appearance, I determined to remove the entire cutaneous mass and replace it by flaps from the breast. Calling in the assistance of Dr. R. J. Levis of the Pennsylvania Hospital, who has a special skill in plastic surgery, we removed the parts very extensively, including all the connective tissue down to the thyroid cartilage; and replaced them with a pair of flaps from the chest. The skin removed was found infiltrated with epithelioma.

The junction of the two wings of the thyroid cartilage was in excellent condition and showed no evidence of the rough usage to which it had been subjected in its section with bone-pliers.

The right ala was soft at the point from over which the first

epithelioma had been removed ; probably as the result of pressure. It was thoroughly scraped, almost to the inner surface. The propriety of removing this wing of the cartilage was discussed by Dr. Levis and myself, but we thought it best to leave matters as they were.

The new flaps united kindly. The parts from which they had been transplanted steadily filled in with granulations, and became nicely covered. But before the patient left the city, some five weeks after the operation, a fistulous tract opened about the lower portion of the central wound ; exposing a sinuous passage leading toward the spot where the cartilage had been scraped. A counter-opening was made at this point, and a seton of india-rubber was introduced and tied in front, in the hope of exciting adhesive inflammation from below upward, to obliterate the sinus. This hope was never realized.

One month later the patient returned with a fistulous opening in the left flap, at its junction with the right, surrounded by a fresh mass of fungous granulation. During all this time the interior of the larynx remained healthy and the voice was good. There was no recurrence of intra-laryngeal growth.

The patient's general health now showed signs of serious impairment, and his family were made aware of the serious nature of the case, and its probably approaching termination. The patient was dissuaded from his object of undergoing another operation, and returned home to await results. I did not see him after this interview.

Early in January of this year I was informed of the patient's death. His own physician having removed his residence, he came under the care of a gentleman who had not previously been professionally connected with the case. In response to my inquiries as to the deportment of the case toward its close, this gentleman kindly wrote me.

"May 10, 1883.

"Your letter received, and would have favored it with a more prompt reply, but was absent from home. Commencing *in medias res :* I was Mr. ——'s physician about forty days prior to his death. When first seen, general appearance fairly good, slight cachexia ; voice unaltered and remained so to the last except from exhaustion. External appearance of tumor : about four inches in diameter, nodulated, indurated, and apparently semi-

cartilaginous formation. Enlarged on right side, smoother and not so large on left. A small sinus on right, through which cricoid cartilage could be felt entirely denuded. The wound proper was closed with a sphacelous centre, or plug (which never detached itself), surrounded by a denuded surface one inch on either side, studded with exuberant granulations. The wound from which flaps were taken healed. Appetite good up to about fifteen days, after which began to decline. Emaciation followed. Cachexia intensified. Brain active up to about five days, when a stage of indifference succeeded, further followed by a comatose condition from cachectic toxæmia. Sank in that condition. I send you a pencil sketch which may give you a clearer idea."

This case, apart from its special interest laryngologically, illustrates, etiologically, the development of epithelioma from the products of local irritation.